# AMENDMENT NO. 1 OCTOBER 2021

# TO

# IS 16722 : 2018 RADIO FREQUENCY IDENTIFICATION ( RFID ) SYSTEM FOR AUTOMOTIVE APPLICATIONS — SPECIFICATION

(*Page* 2, *clause* **4.6**) — Substitute the following for the existing clause:

'**4.6** The Tag ID/EPC ID shall be physically printed on the front adhesive side of the tag using the hexadecimal numbering and QR Code system as per ISO/IEC 18004 : 2015 standard and shall be adequately clear for easy visual recognition. Printing and Design should be as defined by NHAI from time to time.'

(*Page* 2, *clause* **4.7**) — Substitute the following for the existing clause:

'**4.7** Regarding Fixation of RFID Tag prevailing regulations as may be decided by Government of India shall be followed.

(*Page* 2, *clause* **4.8**) — Substitute the following for the existing clause:

'**4.8** The tags should be RFID tamper proof label specially designed for tagging directly to a surface, such as. Glass (windshield) of an automobile. Any attempt to rip or tamper the label (tag) should result in disabling the functionality of the tags to insure a unique one to one relationship between the tag and vehicle thereby preventing unauthorized tag removal and transfers. Such features of the RFID label should result in following actions:

a) destroy damage the antenna; and
b) break the chip-antenna connection.

**Price Group 1**

(*Page* 2, *clause* **4.9**) — Substitute the following for the existing clause:

‘**4.9** The minimum unique tag ID memory size should be 96 bits, minimum EPC memory size should be 96 bits and minimum user memory should be 512 bits.’

(*Page* 2, *clause* **4.10**) — Substitute the following for the existing clause:

‘**4.10** 6 m (min) RFID tag fixed on vehicle windshield from inside in open air.’

[*Page* 2, *clause* **4.12**(a)] — Delete the sub clause.

(*Page* 2, *clause* **4.13**) — Substitute the following for the existing clause:

‘**4.13** The data retention capability should be minimum 10 years with UV protection for normal sunlight protection for normal sunlight exposure and ambient temperature 45 Degree C. For data security the following features must be included: Lock, Unlock, Kill, Write protection, Password protection.’

(*Page* 3, *clause* **4.15.1**, *line* 1) — Substitute ‘Minimum 20 samples of RFID tags shall be submitted for testing together with the relevant documents.’ *for* ‘Minimum ten samples of RFID tags shall be submitted for testing together with the relevant documents.’

(*Page* 3, *clause* **4.15.4**, *line* 1) — Substitute ‘The tags will be tested by an approved transceiver inside an anechoic chamber for a distance of 6 m.’ *for* the tags will be tested by an approved transceiver inside an anechoic chamber for a distance of 8 m.’

(*Page* 3, *clause* **4.15.8**) — Substitute the following for the existing clause:

‘**4.15.8** The RFID tag and transceiver shall be suitably mounted at an ambient temperature.

The position of tag and transceiver shall be fixed representing the actual mounting at a distance specified in **4.10**. A shutter arrangement would be made so that the shutter moves back and forth between the line of vision of tag and transceiver. The shutter shall be operated for 1 00 000 cycles. Shutter ON time to be 3 s and off time to be 2 s that is, 5 s constitute one cycle. The transceiver should read the tag properly.’

(*Page* 5, *clause* **5.2**) — Substitute the following for the existing clause:

‘**5.2** The handheld RFID reader should be a single integrated module including handheld unit and RFID module. The operating transmission frequency range should be between 865 and 868 MHz.’

(*Page* 5, *clause* **5.2.3**) — Substitute the following for the existing clause:

‘**5.2.3** Communication shall be possible using wireless, Bluetooth, USB, RS232, Ethernet etc.’

(*Page* 6, *clause* **5.3.4**) — Substitute the following for the existing clause:

‘**5.3.4** Communication shall be possible using wireless, Bluetooth, USB, RS232, Ethernet etc.’

(TED 28)

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